

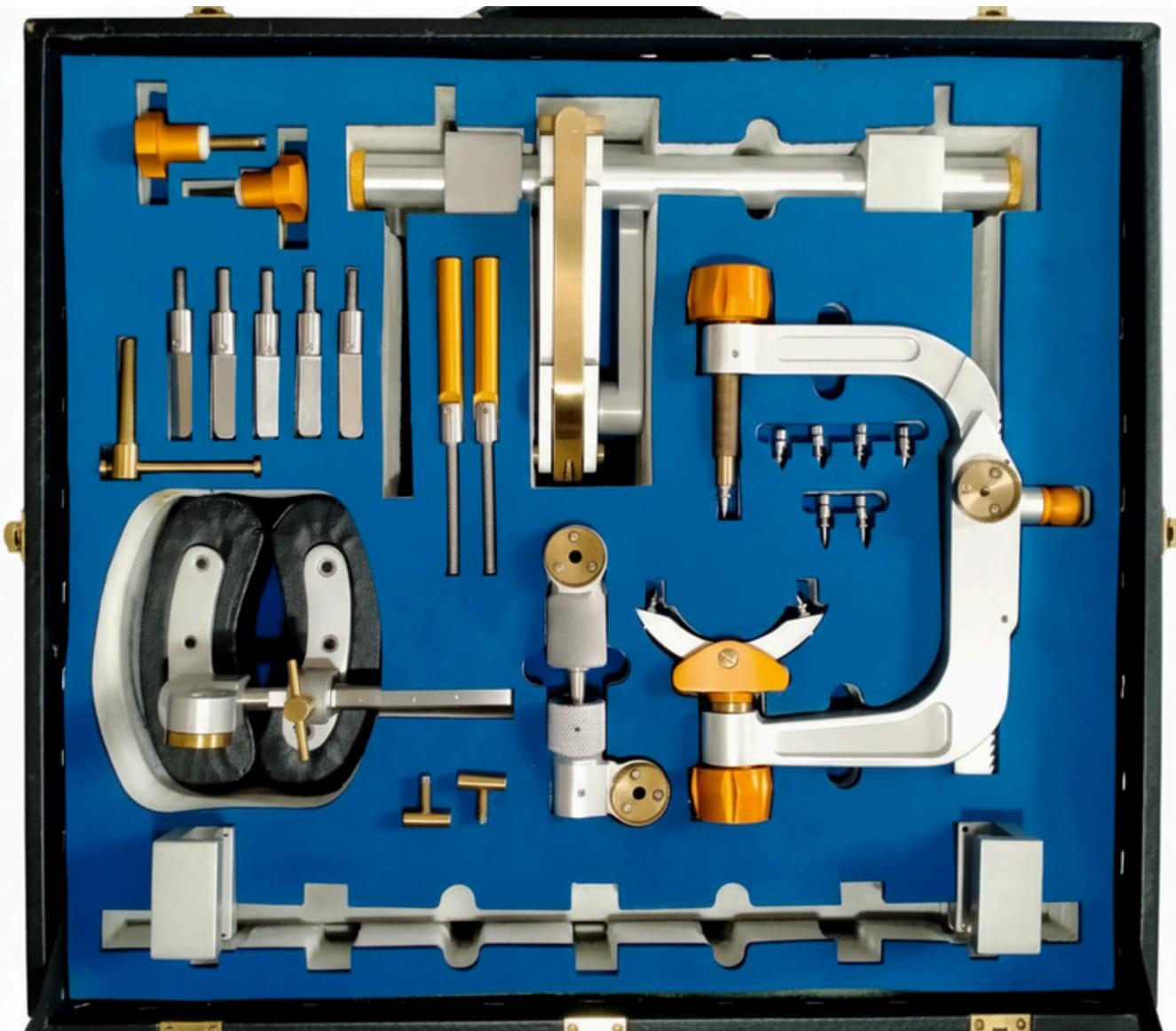


Skull Clamp Mayfield Brain Retractor System

Model / SKU: NS-3055

Category: Neurosurgery Sets | Surgical Instrument Set

Product Page: <https://hamsansurgical.com/product/skull-clamp-mayfield-brain-retractor-system/>





PRODUCT OVERVIEW

The Skull Clamp Mayfield Brain Retractor System is a rigid cranial stabilization and retraction platform designed for neurosurgical procedures requiring absolute head fixation. The 3-pin locking clamp with pressure-regulated pins secures the skull at defined contact points, enabling consistent intraoperative positioning for craniotomy drilling, posterior fossa approaches, and intra-axial tumor resection.

Manufactured to EU Medical Device standards, the system is constructed from ISO-grade surgical stainless steel and is fully autoclavable. The 4-component set, consisting of the Mayfield skull clamp, brain retractor system, horseshoe headrest, and universal table adaptor, provides complete cranial positioning coverage from a single procurement source, CE compliant and ready for immediate clinical deployment.

PERFORMANCE IN CLINICAL PRACTICE

Craniotomy and skull-base surgery require absolute elimination of head movement during drilling and microdissection. The 3-pin rigid fixation design of the Mayfield skull clamp provides the mechanical stability required by standard neurosurgical protocol for intraoperative navigation-guided procedures, where head drift of even 1 mm invalidates registration accuracy.

ISO-grade stainless steel construction ensures dimensional integrity through repeated steam sterilisation cycles. Established reprocessing standards confirm that autoclave-compatible metallic cranial fixation hardware must maintain clamp torque tolerance and pin sharpness across clinical lifecycles. The system's validated reprocessing pathway supports high-volume OR environments where turnaround time and instrument reliability are procurement priorities.

SYSTEM COMPONENTS

Component	Primary Function	Design Details
Mayfield Skull Clamp	Cranial fixation during neurosurgery	Rigid 3-pin clamp, locking arm, pressure-regulated pins
Brain Retractor System	Brain and skull-base exposure	Adjustable articulating arms, lightweight frame
Horseshoe Headrest	Non-invasive head support	Padded, adjustable positioning range
Table Adaptor	Connects system to OR table	Universal fit, stainless-steel locking mechanism

TECHNICAL SPECIFICATIONS

Product Name	Skull Clamp Mayfield Brain Retractor System
Model / SKU	NS-3055
Product Type	Cranial Stabilization and Retraction System
Instrument Count	4 components
Material	Stainless Steel
Reusable	Yes
Positioning Modes	Supine, Prone, Lateral

CLINICAL APPLICATIONS

Procedure	Instrument Role in Procedure
Craniotomy	Rigid skull fixation during bone flap elevation and cortical approach
Skull-Base Surgery	Stable head positioning for extended anterior and lateral skull-base exposure
Posterior Fossa Approaches	Prone or park-bench positioning with full field access
Intra-axial Tumor Resection	Navigation-compatible fixation for intraoperative image-guided resection
Selected Cervical Procedures	Cranial stabilization for upper cervical spine approaches
Spine Surgery	Head and cervical support via horseshoe headrest in prone positioning

KEY FEATURES

- 3-Pin Rigid Fixation: Pressure-regulated pins eliminate skull movement throughout the procedure
- Navigation Compatible: Confirmed compatible with intraoperative navigation systems for image-guided surgery
- Adjustable Retractor Arms: Articulating retractor arm system enables precise brain and skull-base exposure
- Horseshoe Headrest: Padded, non-invasive alternative for positioning without pin penetration
- Universal Table Adaptor: Stainless-steel locking mechanism fits standard OR table rail systems
- Full Autoclave Compatibility: All metallic components validated for steam sterilisation per facility protocol

USAGE AND CARE GUIDELINES

1. Inspect all 4 components before each use: verify pin sharpness, clamp locking function, retractor articulation, and adaptor lock integrity.
2. Disassemble the system prior to cleaning. Rinse all metal surfaces under running water immediately after use to remove biological material.
3. Decontaminate using a validated washer-disinfector or manual cleaning protocol with instrument-grade detergent.
4. Sterilise by steam autoclave per facility protocol. All metallic components are fully autoclave-compatible.
5. Lubricate the clamp locking arm joint and retractor articulation points with instrument-grade lubricant after each sterilisation cycle.
6. Inspect pins for deformation or blunting before re-use. Replace pins at first sign of functional impairment.
7. Store in a clean, dry, covered instrument tray or case. Do not stack heavy instruments on top of the retractor arm assembly.
8. Follow your facility reprocessing SOP and applicable national or international standards for cranial fixation hardware.

FREQUENTLY ASKED QUESTIONS

What procedures is the Skull Clamp Mayfield Brain Retractor System used for?

It is used for craniotomy, skull-base surgery, posterior fossa approaches, intra-axial tumor resection, and selected cervical and spine procedures.

What components are included in this system?

The system includes a Mayfield Skull Clamp (3-pin, locking arm, pressure-regulated pins), Brain Retractor System with adjustable articulating arms, a horseshoe headrest, and a universal table adaptor.

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